# Math 100.2 - Applications in Mathematics 

Fall 2015

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Office hours: Tue 10:30-11:30, Wed 1-2, and Thu 2:30-3:30
Course Materials - The text for this course is the custom printed book from McGraw-Hill containing chapter 10 from Discrete Mathematics and Its Applications, Seventh Edition by Rosen and chapter 13 from Mathematics in Our World, Second Edition by Sobecki, Bluman, Schirck-Matthews.

Course Goals - After successfully completing this course students will:

- understand how mathematical models can help us answer questions, draw conclusions, and make decisions.
- understand a variety of applications of mathematics using concepts of graph theory.
- be able to convert real-world situations into graphs that can be analyzed quantitatively.
- understand the complexities of voting systems.

Homework and Quizzes - Each day there will be reading and homework assigned. Some assignments will be turned in and graded, some will be discussed in class, but not graded. The problems assigned to hand in will be collected at the beginning of the class meeting. In addition, we will have a quiz at the beginning of most classes.

It is vital that you do all the homework problems assigned; you should keep all your work in a binder or notebook for reference. For every hour in class you should expect to spend at least 2 hours doing work outside of class. You cannot learn mathematics without lots of practice!

Exams - There will be two exams. The first will be on October 15 and the second will be on December 10. There is no final exam.

Attendance - Mandatory. Regular attendance is vital. A late assignment will be graded with a reduction of $10 \%$ for each day it is late. There will be no make-up quizzes given, and makeup exams are given only in extreme, pre-approved cases. If you must miss an exam it is your responsibility to contact me in advance. Students who are unable to attend class are responsible for all assignments and material covered in that class.

Grading - Grades will be the result of quizzes, homework, and two tests. The breakdown is as follows:

Culture Points - 5\%
Quizzes/Homework - 25\% total
Projects - $20 \%$ total
First Exam - 25\%
Second Exam - 25\%
Course grades will be determined by the following scale:

| $93-100: \mathrm{A}$ | $73-77: \mathrm{C}$ |
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| $90-93: \mathrm{A}-$ | $70-73: \mathrm{C}-$ |
| $87-90: \mathrm{B}+$ | $67-70: \mathrm{D}+$ |
| $83-87: \mathrm{B}$ | $63-67: \mathrm{D}$ |
| $80-83: \mathrm{B}-$ | $60-63: \mathrm{D}-$ |
| $77-80: \mathrm{C}+$ | $<60: \mathrm{F}$ |

Disclaimers - This syllabus is subject to change through the semester. Any updates to the syllabus will be announced in class. The instructor reserves the right to apply qualitative judgment in determining final grades for the course.

Learning Disability Accommodations - Students who wish to request accommodations in this class for a disability must contact Ms. Elaine Mara, Assistant Director of Academic \& Disability Support, at the lower level of Monocacy Hall, or by calling 610-861-1401. Accommodations cannot be provided until authorization is received from the Academic Support Center.

